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INFORMATION DISCLOSURE STATEMENT Patent Application Examining Group 1652 Docket No. MA-702D2

Serial No. 09/977,653 Confirmation No. 4237 #4

Jay M. Sanders, Patent Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE RECEIVED

Art Unit

1652

FEB 1 3 2002

Applicants

Mark Thompson, Mark E. Knuth, Guy A. Cardineau

TECH CENTER 1600/2900

Serial No.

09/997,653-09/977.653

Conf. No.

4237

Filed

October 15, 2001

For

Bacillus thuringiensis Toxins with Improved Activity

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with 37 CFR §1.97 and §1.98, Applicants would like to bring to the attention of the Examiner the references listed on the attached Forms PTO/SB/08A and PTO/SB/08B.

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR §1.98(d), copies of the references cited on the attached Forms PTO/SB/08A and PTO/SB/08B are not provided herewith because copies of these references were submitted to the Office in prior U.S. Patent Application Serial No. 09/222,594 (filed December 28, 1998; now U.S. Patent No. 6,303,364). Under 35 USC §120, the subject application (Serial No. 09/997,653) relies upon Serial No. 09/222,594 for an earlier filing date.

Docket No. MA-702D2 Serial No. 09/977,653

2

It is respectfully requested that the references listed on the attached Forms PTO/SB/08A and PTO/SB/08B be considered in the examination of the subject application and that their consideration be made of record.

Applicants respectfully assert that the substantive provisions of 37 CFR §§1.97 and 1.98 are met by the foregoing statements. Though no fees are believed to be required for this paper, the Patent Office is hereby authorized to charge any fees required by this paper to Deposit Account No. 19-0065.

Respectfully submitted,

Jay M. Sanders Patent Attorney

Registration No. 39,355

Phone No.: 352-375-8100 Fax No.: 352-372-5800

Address: 2421 N.W. 41st Street, Suite A-1

Gainesville, FL 32606-6669

JMS/ehm

Attachment: Forms PTO/SB/08A and PTO/SB/08B

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Applicati n Number	09/977,653	-RECOVE
Filing Dat	October 15, 200	RECEIVED
First Nam d Inventor	Mark Thompson	FEB 1 3 2002
Group Art Unit	1652	2013 2002
Examiner Name	R. Prouty	TECH CENTED COOK
Attorney Docket Number	MA-702D2	TECH CENTER 600/290

				U.S. PATENT DOCUMEN	TS	
Examiner Initials*	Cite No. 1		ment nd Code ² if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	U1	4,448,885		Schnepf et al.	05-15-1984	(Please review all)
*******	U2	4,467,036		Schnepf et al.	08-21-1984	(Please review all)
	U3	4,797,276		Hermstadt et al.	01-10-1989	(Please review all)
-	U4	4,849,217	7	Soares et al.	07-18-1989	(Please review all)
	U5	4,853,331		Hermstadt et al.	08-01-1989	(Please review all)
	U6	4,918,006		Ellar et al.	04-17-1990	(Please review all)
	U7	4.948.734		Edwards et al.	08-14-1990	(Piease review all)
, h	U8	4,990,332		Payne et al.	02-05-1991	(Please review all)
	U9	5,039,523		Payne et al.	08-13-1991	(Please review all)
	U10	5,093,120	1	Edwards et al.	03-03-1992	(Please review all)
	U11	5,126,133	7	Payne et al.	06-30-1992	(Please review all)
	U12	5,151,363	1	Payne	09-29-1992	(Please review all)
	U13	5,164,180		Payne et al.	11-17-1992	(Please review all)
	U14	5,169,629	1	Payne et al.	12-08-1992	(Please review all)

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		Foreign Patent Document			Name of Patentee or	Date of Publication of	Pages, Columns, Lines,	П
Examiner Initials*	Cite No. 1	Office 3	Number ⁴	Kind Code ⁵ (if known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	T ⁴
	F1	EΡ	0 462 721		Narva et al.	06-04-1991	(Please review all)	
	F2	ΕP	0 500 311		Bradfisch et al.	08-26-1992	(Please review all)	
	F3	WO	92/19739		Schnepf et al.	11-12-1992	(Please review all)	
	F4	wo	94/04684		Payne et al.	03-03-1994	(Please review all)	
	F5	wo	97/13402		Merio et al.	04-17-1997	(Please review all)	
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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Attorney Docket Number

08-08-1995

11-21-1995

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

5,439,881

5,468,636

Application Number 09/977,653 October 15, 2001 Filing Date Mark Thompson 002 **First Named Inventor Group Art Unit** 1652 TECH CENTER 1600/2900 Examiner Name R. Prouty

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U.S. PATENT DOCUMENTS Pages, Columns, Lines, Where Name of Patentee or Applicant Date of Publication of Examiner Cite U.S. Patent Document Relevant Passages or Relevant Figures Appear of Cited Document Cited Document
MM-DD-YYYY Initials* No. Kind Code (Please review all) U15 Narva et al. 02-16-1993 5,186,934 (Please review all) 05-04-1993 **U16** 5,208,017 Bradfisch et al. (Please review all) U17 Narva et al. 08-17-1993 5,236,843 (Please review all) 11-16-1993 U18 Payne et al. 5,262,159 (Please review all) U19 11-16-1993 5,262,399 Hickle et al. (Please review all) U20 12-14-1993 5,270,448 Payne (Please review all) 01-25-1994 **U21** 5,281,530 Sick et al. (Please review all) 02-15-1994 **U22** 5,286,485 Uyeda et al. (Piease review all) **U23** 5,322,932 Narva et al. 06-21-1994 (Please review all) 09-27-1994 **U24** 5,350,577 Payne (Please review all) 06-20-1995 U25 5,426,049 Sick et al. (Please review att) Payne et al. 06-27-1995 1128 5,427,786 (Please review all)

Narva et al.

Pavne et al.

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Applicati n Number 09/977,653 Oct ber 15, 2001 Filing Date First Named Inv nt r Mark Thompson **Group Art Unit** 1652 **Examiner Name** R. Prouty **CENTER 160**0/2900 **Attorney Docket Number** MA-702D2

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	R1	ADANG, M.J. et al., "Characterized Full-Length and Truncated Plasmid Clones of the Crystal Protein of Bacillus thuringiensis subsp. Kurstaki HD-73 and Their Toxicity to Manduca sexta," Gene, 1985, pgs. 289-300, vol. 36.	
	R2	BEEGLE, C.C., "Use of Entomogenous Bacteria in Agroecosystems," Developments in Industrial Microbiology, 1978, pgs. 97-104, vol. 20.	
	R3	BOTTJER, Kurt P. et al., "Nematoda: Susceptibility of the Egg to Bacillus thuringlensis Toxins," Experimental Parasitology, 1985, pgs. 239-244, vol. 60.	
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	R5	COLES, G.C., "Anthelmintic Resistance in Sheep," Veterinary Clinics of North America, Food Animal Practice, 1986, pgs. 423-432, vol. 2(2).	
	R6	COUCH, T.L., "Mosquito Pathogenicity of Bacillus thuringiensis var. Israelensis," Developments in Industrial Microbiology, 1980, pgs. 61-76, vol. 22.	
	R7	CRICKMORE, N. et al., Society for Invertebrate Pathology, 29th Annual Meeting, 3th International Colloquium on Bacillus thuringiensis, University of Cordoba, September 1-6, 1996, Abstract.	
	R8	ELY, S., "The Engineering of Plants to Express Bacillus thuringlensis Delta-Endotoxins," <u>Bacillus thuringlensis. An Environmental Pesticide: Theory and Practice</u> , Entwistle, P.F. at al. (eds.), 1993, pgs. 105-124.	
	R9	FEITELSON, J.S. et al., "Bacillus thuringiensis: Insects and Beyond," Bio/Technology, 1992, pgs. 271-275, vol. 10.	
	R10	GAERTNER, F. and Leo Kim, "Current Applied Recombinant DNA Projects," TIBTECH, 1988, pgs. 54-57, vol. 6(4).	
	R11	GAERTNER, F.H., "Cellular Delivery Systems for Insecticidal Proteins: Living and Non-Living Microorgansisms," <u>Controlled Delivery of Crop-Protection Agents.</u> R.M. Willkins, ed., 1989, pgs. 245-255, Taylor and Francis, New York and London, 1990.	
	R12	HOFTE, H. and H.R. Whiteley, "Insecticidal Crystal Proteins of Bacillus thuringiensis," Microbiological Reviews, 1989, pgs. 242-255, vol. 53(2).	
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Application Number 09/977,653 **Filing Date** October 15, 2001 FEB 1 First Named Inventor Mark Thompson **Group Art Unit TECH CENTER 1600/2900** 1652 **Examiner Name** R. Prouty

MA-702D2

Attorney Docket Number

Complete if Known

NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the Examiner Cite item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), T² Initials* No. publisher, city and/or country where published. KRIEG, V.A. et al., "Bacillus thuringiensis var. tenebrionis: a New Pathotype Effective Against Larvae of Coleoptera," Z. Ang. Ent., 1983, pgs. 500-508, vol. 96. R14 NICHOLLS, C.N. et al., "Evidence for Two Different Types of Insecticidal P2 Toxins with Dual Specificity in Bacillus thuringiensis Subspecies," Journal of Bacteriology, 1989, pgs. 5141-5147, vol. 171(9). **R15** PRICHARD, R.K. et al., "The Problem of Anthelmintic Resistance in Nematodes," Australian Veterinary Journal, 1980, pgs. 239-251, vol. 56. **R16** SCHNEPF, H.E. and H.R. Whiteley, "Cloning and Expression of the Bacillus thuringiensis Crystal Protein Gene in Escheria coll," Proc. Natl. Acad. Sci. USA, 1981, pgs. 2893-2897, vol. 78(5). **R17** SCHNEPF, H.E. et al., "The Amino Acid Sequence of a Crystal Protein from Bacillus thuringiensis Deduced from the DNA Base Sequence," The Journal of Biological Chemistry, 1985, pgs. 6264-6272, vol. 260(10). R18 VISSER, B. et al., "Domain-Function Studies of Bacillus thuringiensis Crystal Proteins: A Genetic Approach,"

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71-88. R19 WABIKO, H. et al., "Bacilius thuringiensis Entomocidal Protoxin Gene Sequence and Gene Product Analysis. DNA, 1986, pgs. 305-314, vol. 5(4). R20 R21 **R22 R23** R24 R25 **R26**

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